

P.P. 2038.

# THE ZOOLOGIST:

A MONTHLY JOURNAL

OF

NATURAL HISTORY.

---

FOURTH SERIES.—VOL. XII.

---

EDITED BY

W. L. DISTANT.

LONDON:

WEST, NEWMAN & CO., 54, HATTON GARDEN.

SIMPKIN, MARSHALL & CO., LTD.

---

1908.



## PREFACE.

---

THE present volume of 'THE ZOOLOGIST' forms the sixty-sixth since its foundation in 1843. This denotes a remarkable longevity, and its pages still exhibit no sign of senility; much healthy competition has taken place during these long years—journals on similar lines have appeared and disappeared, but for sixty-six years 'THE ZOOLOGIST' has never failed in the regularity of its monthly publication. By the death of John William Douglas in 1905 the last of the contributors to its first volume passed away, but in the long series of volumes scarcely the name of an English zoologist is missing among its contributors. Unfortunately no obituary notice has appeared of very many who have written in its pages; were it otherwise, we should possess a very valuable material in the biographical roll-call of British naturalists. This melancholy information is frequently unknown to the Editor till long after the event, and he would earnestly ask the contributors to apprise him of such occurrences and to supply, if possible, the necessary facts. It affords material of considerable literary value, and on many grounds is to be greatly desiderated.

The most cursory perusal of these, or any of these, sixty-six volumes gives no uncertain indication of the prevalent studies of British naturalists. Ornithology undoubtedly holds the first place, and the love of birds is only equalled by that of insects, though the former naturally is, and always will be, the prominent feature of 'THE ZOOLOGIST,' entomology having so

many of its own special publications. Mammals and Fishes in the order named come next in popularity; after these Reptiles and Crustacea; the other Orders are treated in a more sporadic manner. If this is the evidence of 'THE ZOOLOGIST' to the present date we may well speculate on the conclusions that may be drawn when another sixty-six volumes are completed. The trend in zoological study over a given period is an important factor in the estimation of biological speculation, and the breath of philosophical theories as regards animal life during different generations or individual life epochs. We must often considerably value a theory or conclusion by the personal equation, by the knowledge and personal and mental attitude of its promoter, as well as by the zoological standpoint of his day. 'THE ZOOLOGIST' reflects the latter over a considerable number of years.





# CONTENTS.

## ALPHABETICAL LIST OF CONTRIBUTORS.

- ADAMS, LIONEL E., B.A.  
Swarms of insects, &c., in the Crimea, 9; Notes on the Hairy Armadillo, 342
- ALEXANDER, H. G.  
Note on the Great Spotted Woodpecker, 228
- APLIN, O. V., F.L.S., M.B.O.U.  
American Wood-Duck in Oxfordshire, 33; Hoopoe in Northamptonshire, 312; Notes on the Ornithology of Oxfordshire (1907), 326; Early flocks of Starlings, 350; Notes on the Tuco-Tuco and the Hairy Armadillo, 392; September movement of Shearwaters, 396; Late breeding of, and retention of summer dress by, the Great Crested Grebe, 407
- ARNOLD, E. C.  
Barred Warbler in Norfolk, 393; Aquatic Warbler near Eastbourne, 467
- ARNOLD, FRANK A.  
An early flock of Starlings, 312; Sandwich Tern on Breydon, Yarmouth, 351; Sabine's Gull on Breydon, 352; Bird-notes from Yarmouth, 352
- ARUNDEL, WALTER B.  
Gregarian occurrence of the Water-Shrew in Yorkshire, 189
- ATLEE, H. G.  
Ornithological notes, 313; Notes on the ornithology of Richmond Park, Surrey, 432
- BAGNALL, RICHARD S., F.E.S.  
On Armadillidium album, Dollfus, a rare Woodlouse new to the Fauna of Great Britain, 152
- BEDFORD, MARY DUCHESS OF  
American Wood-Duck in Oxfordshire, 73
- BENSON, Rev. CHARLES W., LL.D.  
The Great Black Woodpecker 190
- BENTHAM, C. H.  
Prolific breeding of the Dabchick, and late nesting of the Great Crested Grebe, 351
- BERGROTH, E., C.M.Z.S.  
Additions and corrections to the 'Index Zoologicus' of C. O. Waterhouse, 252
- BLATHWAYT, Rev. F. L.  
Wild Ducks near Lincoln City, 33; Wildfowl in Somerset, 73, 114; Honey-Buzzards in Lincolnshire, 428; Notes on Heronries, 450; Rough-legged Buzzard in Lincolnshire, 469
- BOOTH, H. B.  
September movements of, Shearwaters, 429; Old local bird-names, 430, 470
- BRIGGS, T. H.  
Alpine Swift at Lynmouth, North Devon, 269
- BUNTING, R. H.  
Notes on the mammals of the Channel Islands, 461
- BUNYARD, PERCY F.  
Eggs of Red-backed Shrike, 30
- BUTTERFIELD, E. F.  
 Tits feeding on maize, 155; Notes on the Pied Flycatcher, 222; Cuckoo's eggs, 270; Birds which do not usually perch, 272; Fecundity of the Chaffinch, 428
- BUXTON, P. A.  
Common Shrew in Skye, 189
- CARR, J. W.  
The Smooth Snake in Devonshire, 34
- CLARK, JAMES, M.A., D.Sc. A.R.C.S.  
An annotated list of Cornish fishes, 13; Notes on Cornish mammals, 409

- CLARK, J. A.  
Peregrine Falcon in Norfolk, 191;  
Ortolan Bunting at Plaistow,  
Essex, 269
- CLEAVE, H. P. O.  
Peregrine Falcons and Buzzards in  
Cornwall, 270
- COCKS, ALFRED HENEAGE, M.A.,  
F.S.A., F.Z.S., M.B.O.U.  
Ptarmigan reported from Trondh-  
jem, Norway, 113; Cornish  
mammals, 466
- COLLIER, W. PAYNE  
Notes on the Otter, 92
- CORBIN, G. B.  
Rough-legged Buzzard in Hants,  
155; Notes from South-west  
Hants, 156
- CUMMINGS, BRUCE F.  
Captures and field report for North  
Devon for 1907, 97; Speculations  
on the origin and development  
of the parental instinct in birds,  
241
- CUMMINGS, S. G.  
Bean-Geese on the Dee marshes,  
72
- DALGLIESH, GORDON  
Variety of Wigeon, 156; The mam-  
mals of Surrey, 178; Notes on  
the Ephemeridæ, 456; Golden-  
eye in Somersetshire, 469; Re-  
tention of summer dress by Great  
Crested Grebe, 469
- DEWAR, J. M.  
Notes on the Oystercatcher, with  
reference to its habit of feeding  
upon the Mussel, 201
- DISTANT, W. L.  
Curious habit of a Chelifer, 77;  
Obituary notice of John Thomas  
Carrington, 160; Rhynchota and  
their parasites in South Africa,  
194
- DONISTHORPE, HORACE ST. JOHN K.,  
F.Z.S.  
A few notes on Myrmecophilous  
Spiders, 419
- DUNLOP, G. A.  
Occurrence of the Grey Seal in the  
Mersey, 268
- DYE, B.  
Little Auk captured alive near  
Yarmouth, 114; Spotted Crake  
at Yarmouth, 429; Honey-Buz-  
zard in Suffolk and Norfolk,  
468
- ELLIOTT, J. STEELE  
Nesting of the Wryneck, 393;  
Nesting of the Kingfisher, 394
- EVANS, WILLIAM  
The "drumming" of the Snipe, 271
- FENWICK, N. P., Jun.  
Glossy Ibis in North Devon, 393
- FLOWER, Capt. STANLEY S.  
Prices of animals (1896-1908), 281
- FORREST, H. E.  
The Marten in England and Wales,  
1; A correction ('Vertebrate  
Fauna of North Wales'), 77;  
Common Newt in Carnarvon-  
shire, 159; Vertebrates of Wales  
and Ireland, 321,—Corrigenda  
et Addenda, 454
- FOWLER, W. WARDE, M.A.  
Notes at Avignon (April 2nd-11th,  
1908), 174; The Songs of Chiff-  
chaff and Willow-Wren, 226
- GILL, E. LEONARD  
Glossy Ibis on the Northumber-  
land coast, 394
- GREEN, E. ERNEST  
Curious habits of Chelifers, 159
- GURNEY, J. H., F.L.S., F.Z.S.  
Ornithological Report for Norfolk  
(1907), 121; Erratum, 314
- GYNGELL, WALTER  
Fecundity of the Chaffinch, 467
- HEAD, CHARLES D.  
Honey-Buzzard in North Wales,  
156
- HEARDER, WILLIAM  
Sea-Mouse near Plymouth, 470
- HEATHERLEY, FRANCIS, F.R.C.S.  
A visit to the Ternery at Wells-by-  
the-Sea, 361
- HEPBURN, THOMAS  
The birds of North Kent—autumn  
passengers, 106
- HERMAN, OTTO  
Ringed birds, 352
- HOPE, LINNÆUS E.  
"Notes from Lakeland (Cumber-  
land and Westmorland)," 192
- HUXLEY, J. S.  
Mimicking song of Chiffchaff, 268
- INGRAM, COLLINGWOOD  
Variety of Great Titmouse, 113;  
Some rare Kentish birds, 272;  
Montagu's Harrier in Surrey,  
308
- KELSALL, J. E.  
Mimicking song of the Chiffchaff,  
227

- KERR, GRAHAM W.  
The birds of the district of Staines,  
137
- KIRBY, W. F., F.L.S., &c.  
Introduced Orthoptera, 116, 195;  
On the longevity of British entomologists, 216; Obituary notice of Charles William Bingham, 465
- LEIPER, ROBERT T., M.B., F.Z.S., &c.  
Some generic names that have been omitted from recent zoological indices, 390
- LLOYD, J. P.  
The Jumping Bean, 353
- LODGE, R. B.  
Experiences with Eagles and Vultures in the Carpathians, 401
- MACKEITH, T. THORNTON  
Distinct types in eggs, 74; Notes on the birds of West Renfrewshire (Caldwell District), 1907, 230
- MALLOCH, W. & T.  
Fulmar Petrel in the Firth of Forth, 396
- MARLEY, H. W. BELL  
Rhynchota and their parasites in South Africa, 193
- MCCLYMONT, J. R.  
The Penguins and the Seals of the Angra de Sam Brás, 213
- MCINTOSH, Professor, M.D., LL.D., F.R.S.S. L. & E.  
On the perforations of marine animals, 41
- MEADE-WALDO, GEOFFREY, B.A., F.E.S.  
Notes and observations made during a cruise to the East on board the 'Valhalla' R. Y. S. (1907-1908), 261
- MEYRICK, Lieut.-Col. H.  
Mimicking song of Chiffchaff, 190; Lesser Redpoll nesting in Middlesex, 227
- MORRIS, ROBERT  
Nesting of the Lesser Redpoll in Sussex, 350
- NELSON, T. H.  
Pallas's Sand-Grouse in Yorkshire, 312
- NEWSTEAD, ALFRED  
Ornithological records from Chester and North Wales, 73
- OLDHAM, CHARLES, F.Z.S., M.B.O.U.  
Field-notes on the birds of the
- Ravenglass Gullery, 161; Barbastelle Bat in Hertfordshire, 391
- PARKER, T. C.  
"Notes from Lakeland (Cumberland and Westmorland, 1905)," 144, 185
- PARKIN, W. H.  
Notes from Shipley District, 234
- PATTERSON, ARTHUR H., A.M.B.A.  
Black Sea-Bream at Yarmouth, 115; Lesser Forkbeard at Yarmouth, 115; Double Flounder at Yarmouth, 353; Incursion of Godwits at Yarmouth, 395; The Badger in Norfolk, 426; Abundance of Crane-flies at Yarmouth, 434; Some fish-notes from Yarmouth for 1908, 441
- PERLMANN, S. M.  
Is the Okapi identical with the "Thahash" of the Jews?, 256
- RAMSBOTHAM, R. H.  
Otters destroying Moorhens, 226; Irregular appearance of Blackbird, 312
- RENSHAW, GRAHAM, M.B., F.Z.S.  
The prices of animals, 370
- ROBINSON, H. W.  
Great Northern Diver and Eared Grebe, 228; Wrynecks in North Lancashire, 428
- ROPE, G. T.  
White Water Vole in Suffolk, 190
- RUMBELOW, R. E.  
Note on the proboscis or tongue of *Sphinx ligustri*, 435
- SELOUS, EDMUND  
Some notes on a habit of the Great Spotted Woodpecker in relation to a similar but more developed habit in the Californian Woodpecker, 81; Sexual selection in birds, 191; Some observations on butterflies and hornets (made in France), 333
- SERLE, Rev. WILLIAM, M.B.O.U.  
Birds of the Graakallen Mountain, Norway, 64
- SIM, GEORGE  
Glossy Ibis in Aberdeenshire, 113
- SINEL, J.  
A list of Channel Islands mammals, 463
- SMITH, SYDNEY H.  
Great Grey Shrike near York, 32

- SOUTHWELL, THOMAS, F.Z.S.  
Notes on the Arctic Whaling Voyage of 1907, 61; Newfoundland Sealing (1907), 151
- SWINTON, A. H.  
The vocal and instrumental music of insects, 376
- THORPE, D. LOSH  
"Notes from Lakeland (Cumberland and Westmorland)," 192
- TUCK, Rev. JULIAN G., M.A.  
Domestication of the Jackdaw, 72; Effect of recent late snow on bird-life, 192; Notes on nest-boxes, 513; Red-footed Falcon in Norfolk, 394
- TURNER, R. E.  
Curious habits of Chelifers, 193
- WALTON, J. S. S.  
The Smew in Northumberland, 73
- WARREN, ROBERT  
Some ornithological notes from Mayo and Sligo, 75, 229; Pied Flycatcher in Ireland, 269; Unusual site for a Great Black-backed Gull's nest, 396, 432; "Vertebrates of Wales and Ireland"—correction, 397; Migration of small birds in Co. Sligo, 431
- WASMANN, ERIC, S.J.  
On the evolution of *Dinarda*, a genus of Coleoptera, 68
- WHISTLER, HUGH  
Rough notes in East Sussex (1908), 345
- WHITAKER, J.  
Short-eared Owls nesting at Rainworth, 467; Interesting Ducks in Notts, 469
- WILLIAMS, W. J.  
Richard's Pipit in Ireland, 32; Ospreys in Co. Sligo, 33; Night-Heron in Ireland, 33
- WITHERBY, H. F.  
Wood-Pigeon diphtheria, 76

---

SPECIES NEW TO THE BRITISH FAUNA DESCRIBED IN THIS VOLUME:—

*Armadillidium album*, Dollfus. . . . . page 152.



## ALPHABETICAL LIST OF SUBJECTS.

- Acanthias vulgaris*, 25  
*Acanthiza chrysorrhœa*, 37  
*Accentor modularis*, 66  
*Acherontia lachesis*, 264  
*Acipenser sturio*, 23  
*Acridium ægyptium*, 116  
*Acrocephalus aquaticus*, 467; *palustris*, 137  
*Ægialitis cantiaica*, 111; *hiaticola*, 107, 141, 164, 352  
*Æx galericulata*, 73; *sponsa*, 33, 73, 158  
Africa—*Rhynchota* and their parasites, 193; Penguins and Seals, 213; *Chelifer*, 77, 159, 193  
*Agrianome gemella*, 193  
*Alario alario*, 197  
*Alauda arvensis*, 164  
*Alcedo ispida*, 394  
*Alcippe lampas*, 45  
*Alopecias vulpes*, 24, 104  
*Alytes obstetricans*, 247  
*Ammodytes lanceolatus*, 14; *tobianus*, 14  
*Ammophila sabulosa*, 385  
*Anarrhichas lupus*, 443  
*Anas albifrons*, 157; *boscas*, 67, 156, 246; *brachyrhynchus*, 157  
*Anguilla vulgaris*, 22  
Animals, prices of, 281, 370; marine, perforations of, 41  
*Anomia ephippium*, 42  
*Anoplocnemis curvipes* (fig.), 194  
*Anser brachyrhynchus*, 72; *segetum*, 72  
*Anthus pratensis*, 66, 164; *richardi*, 32; *trivialis*, 31, 66  
Ants from a social and theosophical standpoint, Mr. W. F. Kirby on, 38  
*Aphrodite aculeata*, 470  
*Apodemus sylvaticus*, 462, 463  
*Aquila chrysaëtus*, 405; *imperialis*, 402; *maculata*, 131  
Arctic Whaling Voyage of 1907, notes on, 61  
*Ardea alba*, 471; *cinerea*, 108, 352  
*Ardetta minuta*, 157  
*Armadillidium album*, 152; *nasatum*, 154  
*Armadillo*, *Hairy*, notes on, 342, 392  
*Arvicola amphibius*, 190  
*Asio accipitrinus*, 467  
*Athene noctua*, 113  
*Atherina presbyter*, 14  
Auk, Little, captured alive near Yarmouth, 114; taken near Yarmouth in 1902, 134,—fig., 133  
Avignon, notes at, 174  
*Bacillus diptheriæ columbarum*, 76  
Badger in Norfolk, 426  
*Balanoptera musculus*, 98  
*Barbastella barbastellus*, 391, 411, 464  
Bat, *Barbastelle*, in Hertfordshire, 391,—at Jersey, 464; Great Horse-shoe, 464  
*Batrachians* of Wales and Ireland, 323, 454  
Bean, Jumping, 353  
*Beberia*, 58  
*Belenois taprobana*, 262  
*Belone vulgaris*, 14  
*Bernicia nigricans*, 124  
Bird-names, some old local, 431, 470  
Birds of Graakallen Mountain, Norway, 64,—North Kent, 106,—Staines district, 137,—Ravenglass Gullery, 161,—Ternery at Wells-by-the-Sea, 361; migration of, 106, 122, 129, 130, 429, 431,—still a mystery, 106; sharing same nest, 143; sexual selection in, 191; parental instinct in, 241; some rare Kentish, 272; which do not usually perch, 272; seen during a cruise to the East, 262; ringed, 352; British, feeding habits of, 356; Shore, migratory movements of, 360  
Blackbird at Avignon, 174; irregular appearance of, 312  
Blackcap at Avignon, 174, 176  
Blattidæ, 116  
*Blennius pholis*, 104  
*Bombus terrestris*, 386  
*Bonellia*, 44  
BOOKS NOTICED :—  
Final Natural History Essays, by Graham Renshaw, 35  
How to Sex Cage-Birds, British and Foreign, by A. G. Butler, 36

- The Useful Birds of Southern Australia, with Notes on other Birds, by Robert Hall, 37
- The Vertebrate Fauna of North Wales, by H. E. Forrest, 78
- Birds of Britain, by J. Lewis Bonhote, 79
- Guide to the Specimens of the Horse Family (Equidæ) exhibited in the Department of Zoology, British Museum (Natural History), 80
- Records of the Indian Museum (a Journal of Indian Zoology), 80
- A Monograph of the British Annelids—Polychæta (Vol. II., pt. 1), Nephthydidæ to Syllidæ, by William Carmichael McIntosh, 117
- The Work of John Samuel Budgett, Balfour Student of the University of Cambridge, edited by J. Graham Kerr, 118
- A Guide to the Study of Australian Butterflies, by W. J. Rainbow, 119
- Three Voyages of a Naturalist, by M. J. Nicoll, 195
- The Moths of the British Isles, by Richard South, 196
- Sketches of South African Bird-Life, by Alwin Haagner, 197
- Ornamental Waterfowl, a Practical Manual on the Acclimatization of the Swimming Birds, by Hon. Rose Hubbard, 198
- African Nature Notes and Reminiscences, by Frederick Courtney Selous, 235
- A Guide to the Elephants (Recent and Fossil) exhibited in the Department of Geology and Palæontology in the British Museum (Natural History), 236
- A Guide to the Gallery of Fishes in the Department of Zoology in the British Museum (Natural History), 237
- The Senses of Insects, by Auguste Forel, 273
- Animal Life, by F. W. Gamble, 274
- From Ruwenzori to the Congo, a Naturalist's Journey across Africa, by A. F. R. Wollaston, 398
- How to Attract and Protect Wild Birds, by Martin Hiesemann, translated by Emma S. Buchheim, 399
- Conditions of Life in the Sea—a Short Account of Quantitative Marine Biological Research, by James Johnstone, 436
- Through Southern Mexico, being an Account of the Travels of a Naturalist, by Hans Gadow, 437
- The Origin of Vertebrates, by Walter Holbrook Gaskell, 439
- Bird-Hunting through Wild Europe, by R. B. Lodge, 470
- Experimental Zoology, Part I. Embryogeny, by Hans Przibram, 472
- Botaurus stellaris*, 73
- Brambling in Norway, 66
- Branchiostomma lanceolata*, 29
- Breeding of Teal in North Devon, 100,—Marsh-Warbler in Surrey, 137,—Pochard in Berkshire, 139; prolific, of Dabchick, 351; habits of Black-headed Gull, 164,—Sandwich Tern, 166, 230,—Common Tern, 169, 361, 368,—Lesser Tern, 172, 363, 367,—Night-ingale, 328,—Ringed Plover, 365, 369,—Redshank, 366, 368; late, of Great Crested Grebe, 407
- British Association in Dublin (1908), 120, 354
- Buceros bicornis*, 191
- Bufo viridis*, 11
- Bullfinch, Northern, in Norway, 66
- Bunting, Ortolan, at Plaistow, 269; Reed, at Avignon, 174; Yellow-breasted, near Wells, Norfolk, 129
- Bustard, Little, 272
- Buteo lagopus*, 155, 469; *vulgaris*, 67
- Butterflies, swarms of, in the Crimea and at sea, 11; at Avignon, 177
- Butterflies and Hornets, some observations on (made in France), 333
- Buzzard, 146; in Norway, 67,—Cornwall, 270; Honey, in North Wales, 156,—Lincolnshire, 428,—Suffolk and Norfolk, 468; Rough-legged, in Hants, 155,—Lincolnshire, 469
- Caddis larvæ and water-lilies, 319
- Calidris arenaria*, 102
- Canis vulpes*, 181, 464
- Cantharus lineatus*, 115, 442
- Capercaillie in Norway, 67



*Caranx trachurus*, 104  
*Carcharias glaucus*, 23  
 Carpathians, experiences with Eagles and Vultures in, 401  
*Carpocapsa saltitans*, 354  
*Cathemus lanatus*, 384  
*Cellepora*, 43  
*Centrina salviani*, 26  
*Cerianthus*, 43  
*Chærocampa celerio*, 265; *theylia*, 262  
 Chaffinch in Norway, 66; fecundity of, 428, 467  
 Channel Islands, mammals of, 461  
 Charles Darwin and Alfred Russel Wallace, fiftieth anniversary of the famous joint communication by, 275  
*Chelifer*, curious habits of, 77, 159, 193,—figs., 77, 160; equester, 78  
*Chelura pontica*, 46; terebrans, 46  
 Chiffchaff, mimicking song of, 190, 226, 227, 230, 268, 313; at Avignon, 176  
*Chrysomitris spinus*, 66, 73  
*Chrysops cœcutiens*, 388  
*Chrysotoxum arcuatum*, 388  
 Chub, voracity of, 40  
*Cicada orni*, 377, 379; *plebeja*, 378, 379  
*Cicadatra atra*, 382  
*Cicadetta montana*, 376 (*hæmatodes*), 377  
*Cicadidæ*, 382  
*Ciorrhina oxycathæ*, 388  
*Circus cineraceus*, 308; *cyaneus*, 272, 308  
*Cirolana borealis*, 444  
*Clangula glaucion*, 139, 469  
*Cliona*, 41  
*Clœon dipterum*, 457  
*Clupea alosa*, 22; *finta*, 22; *haren-gus*, 19, 243; *pilchardus*, 21; *sprattus*, 20  
 Cod-fish, Bull-dog (fig.), 446; deformed, 443, 444 (fig.)  
*Collembola*, some Arctic and Ant-arctic, Prof. George H. Carpenter on, 359  
*Columba œnas*, 164  
*Colymbus arcticus*, 228; *glacialis*, 142, 228; *septentrionalis*, 73  
*Conger vulgaris*, 22  
*Copiophora brevicornis*, 117  
*Coronella austriaca*, 34  
*Corvus cornix*, 67, 138; *frugilegus*, 164; *monedula*, 164; *splendens*, 263

## COUNTY RECORDS:—

*Berkshire*—Pochard, 139  
*Cheshire*—Bean-Goose, 72; Ornithological notes, 73  
*Cornwall*—Cornish fishes, 13; Peregrine Falcon, 270; Buzzard, 270; Cornish mammals, 409, 466  
*Cumberland*—Notes, 144, 185, 192; Ravenglass Gullery, 161  
*Devonshire*—Smooth Snake, 34; Mammals, 97; Birds, 99; Fishes, 103; *Armadillidium album*, a rare Woodlouse, 152; Alpine Swift, 269; Glossy Ibis, 395; Sea-Mouse, 470  
*Essex*—Ortolan Bunting, 269  
*Gloucestershire*—Great Titmouse, 113; Manx Shearwater, 397  
*Hampshire*—Rough-legged Buzzard, 155; Ornithological notes, 156; Chiffchaff, 227  
*Hertfordshire*—Barbastelle Bat, 391  
*Kent*—North, birds of, 106; some rare Kentish birds, 272  
*Lancashire*—Grey Seal in Mersey, 268; Cuckoo, 270; Blackbird, 312; Wryneck, 428  
*Lincolnshire*—Wild Ducks, 33; Honey-Buzzard, 428; Heronries, 450; Rough-legged Buzzard, 469  
*Middlesex*—Birds of Staines, 137, 228; Chiffchaff, 190; Lesser Redpoll, 227; Marsh-Warbler, 137  
*Norfolk*—Little Auk, 114; Black Sea-Bream, 115; Lesser Forkbeard, 115; Ornithological Report (1907), 121, 314; Bird varieties (plumage), 135; Peregrine Falcon, 191; Sandwich Tern, 351; Sabine's Gull, 352; Ornithological notes, 352; Double Flounder, 353; Barred Warbler, 393; Red-footed Falcon, 394; Godwit, 395; Visit to Ternery at Wells-by-the-Sea, 361; Badger, 426; Spotted Crake, 429; Crane-fly, 434; Fish-notes from Yarmouth, 441; Bull-dog Cod-fish, 444, 446; Smelt, 446; Honey-Buzzard, 468  
*Northamptonshire*—Hoopoe, 312; Great Crested Grebe, 407  
*Northumberland*—Smew, 73; Glossy Ibis, 394  
*Nottinghamshire*—Manx Shearwater, 397; Short-eared Owl, 467; Interesting Ducks, 469

- Oxfordshire* — American Wood-Duck, 33, 73; Chiffchaff and Willow-Wren, 226; Ornithology of, 326; Starling, 350; Manx Shearwater, 396
- Shropshire* — Wryneck, 393; Kingfisher, 394
- Somersetshire* — Wildfowl, 73, 114; Heronries, 452; Golden-eye, 469
- Suffolk* — Jackdaw, 72; Water-Vole, 190; Effect of snow on bird-life, 192; Nest-boxes, 313; Honey-Buzzard, 468
- Surrey* — Mammals of, 178; Montagu's Harrier, 308; Starling, 312; Ornithological Notes, 313, 432; Dabchick, 351; Great Crested Grebe, 351
- Sussex* — Wigeon, 156; Notes, 234, 345; Lesser Redpoll, 350; Aquatic Warbler, 467
- Westmorland* — Notes, 144, 185, 192; Otters destroying Moorhens, 226
- Yorkshire* — Great Grey Shrike, 32; Tit, 155; Water-Shrew, 189; Pallas's Sand-Grouse, 312; Chaffinch, 428
- Crabro cephalodes*, 383; *cribrarius*, 383
- Crake, Spotted, at Yarmouth, 429
- Crane-flies, abundance, at Yarmouth, 434
- Crangon vulgaris*, 442
- Creepers, Tree, at Avignon, 174
- Crimea, swarms of insects, &c., in, 9
- Crocidura russula*, 463
- Crow, Hooded, in Norway, 67
- Crows in Colombo Harbour, 263
- Cruise to the East on board the 'Valhalla' (1907-8), notes and observations made during a, 261
- Cryphæca diversa*, 423
- Cryptophialus*, 45
- Ctenomys brasiliensis*, 392; *magellanicus*, 392
- Cuckoo in Norway, 67; origin of parasitic habits of, 245; egg-depositing by, 129, 138, 140, 141, 143, 245, 270, 329
- Cuculus canorus*, 32, 67, 129, 138, 140, 141, 143, 245, 270, 329
- Curlew, 106, 365; in Norway, 67
- Cygnus musicus*, 99
- Cyprinus carassius*, 17, 445,—var. *auratus*, 17; *carpio*, 17
- Cypselus melba*, 175, 269
- Dabchick, 432; prolific breeding of, 351
- Damaliscus pygargus*, 35
- Dammara australis*, 58
- Danais chrysippus*, 265
- Dasypoda hirtipes*, 385
- Dasypus sexcinctus*, 392; *villosus*, 342, 392
- Deilephila euphorbiæ*, 11
- Delphinus delphis*, 418
- Dendrocopus major*, 81, 228
- Devon, North, captures and field report for 1907, 97; mammals, 97; birds, 99; fishes, 103
- Diblemma donisthorpei*, 424
- Dichromia orosia*, curious habits of, 263
- Diestrammena marmorata*, 116, 195
- Dinarda*, a genus of Coleoptera, evolution of, 68
- Dipper, 99
- Diver, Great Northern (Black-throated?), at Staines, 142, 228
- Doleschallia basaltide*, 264
- Dolichopus nobilitatis*, 389
- Donacia gyrinus*, 386
- Dorylaea rhombifolia*, 116
- Dotterel, 110
- Dromæus irroratus*, 248
- Duck, American Wood, in Oxfordshire, 33, 73,—in Hants, 158; Golden-eye, in Somersetshire, 469; Mandarin, in Hants, 158
- Ducks, Wild, near Lincoln city, 33; interesting, in Notts, 469
- Eagle, Golden, in the Carpathians, (Plate IV.), 405; Imperial, in the Carpathians, 402; Spotted, at sea, 131
- Echinorhinus spinosus*, 26
- Echinus lividus*, 43
- Edwardsia, 43
- Eel attacking Salmon, 319
- Eggs of Red-backed Shrike, 30, 74; of Guillemot, 30; of Tree-Pipit, 31; of Cuckoo, 32, 270; distinct types of, 74
- Elasmobranchii*, 243
- Emberiza citrinella*, 66; *hortulana*, 269
- Engraulis enchrasicholus*, 18
- Entomologists, British, longevity of, 216
- Ephemera danica*, 457; *vespertina*, 457; *vulgata*, 458
- Ephemeridæ, notes on, 456,—fig., 459
- Erinaceus europæus*, 179, 412, 463

- Eristalis tenax*, 388  
*Esox lucius*, 14  
*Eucalyptus marginatus*, 58  
*Eudromias morinellus*, 110  
*Eunomos alniaria*, 384  
*Euplœa* sp., 265  
*Evansia merens*, 422  
*Evotomys cæsarius*, 462; *glareolus*, 417; *skomerensis*, 462  
*Exocetus volitans*, 15  
  
*Falco æsalon*, 469; *peregrinus*, 191; *vespertinus*, 394  
*Falcon*, *Peregrine*, in Norfolk, 191,—in Cornwall, 270; *Red-footed*, in Norfolk, 394  
*Fieldfare* in Norway, 65  
*Fish-notes* from Great Yarmouth for 1908, 441  
*Fishery Congress*, Fourth International, 318  
*Fishes*, Cornish, annotated list of, 13; of Wales and Ireland, 322, 454; large, caught in 1907, 39, 199  
*Flycatcher*, *Pied*, notes on, 222; in Ireland, 269  
*Flounder*, double, 353  
*Forkbeard*, Lesser, at Yarmouth, 115  
*Formica*, 68  
*Fratincola rubetra*, 65  
*Fringilla cœlebs*, 66; *montifringilla*, 66, 138  
*Fuligula ferina*, 139  
*Fulmarus glacialis*, 272, 396  
  
*Gadus æglefinus*, 105; *pollachius*, 443; *virens*, 444  
*Galeus vulgaris*, 24  
*Gallinæ*, 243  
*Gallinula chloropus*, 226  
*Gasterosteus aculeatus*, 15,—vars. *trachurus*, *spinulosus*, and *gymnurus*, 15; *spinachia*, 15, 105  
*Gastrochæna*, 44, 56  
*Gastrophilus equi*, 388  
*Globicephalus melas*, 417  
*Gobio fluviatilis*, 17  
*Gobius minutus*, 105; *parnelli*, 105  
*Godwits*, incursion of, at Yarmouth, 395  
*Goosander* seen flying over Vauxhall Bridge, 313  
*Goose*, *Bean*, on Dee marshes, 72; *Canada*, in Hants, 158; *Pacific Brent* (*Black Brent*) (Plate I.), 124  
*Graakallen Mountain*, Norway, birds of, 64  
  
*Grampus griseus*, 417  
*Grapholitha sebastianiæ*, 354  
*Grebe*, *Eared* (*Sclavonian*?) at *Staines*, 142, 228; *Great Crested*, late breeding of, 351, 407,—retention of summer dress by, 407, 469  
*Greenfinch* in Norway, 66  
*Grouse*, *Black*, 101; *Pallas's Sand*, in *Yorkshire*, 312  
*Gryllotalpa*, 457  
*Gull*, *Black-headed*, 109,—breeding habits of, 165; *Great Black-backed*, 109,—unusual site for nest of, 396; *Sabine's*, on *Breydon*, *Yarmouth*, 352  
*Gullery*, *Ravenglass*, field-notes on birds of, 161  
*Gypaëtus barbatus*, 401, 471  
*Gyps fulvus*, 403  
  
*Hæmatopus ostralegus*, 111, 164, 201  
*Hahnia helvola*, 423  
*Halichærus gryphus*, 268, 415  
*Hants*, South-western, notes from, 156  
*Harpactes hombergi*, 423  
*Harpalus calceatus*, 10  
*Harrier*, *Montagu's*, in *Surrey*, 308; nest and eggs of (fig.), 309  
*Heliophilus pendulus*, 387  
*Helix*, 56; *pomatia*, 176  
*Heron*, *Night*, in Ireland, 33; *Purple*, at *Kirkley*, *Norfolk*, 130  
*Heronries*, notes on, 450; *Arlington*, *E. Devon*, 101; *Lincolnshire*, 450; *Muncaster*, 173; *Somerset*, 452  
*Hippocampus antiquorum*, 17  
*Hippolyte spinus*, 445  
*Hoopoe* in *Northamptonshire*, 312  
*Hydrochelidon nigra*, 112, 141  
  
*Ibis falcinellus*, 395  
*Ibis*, *Glossy*, in *Aberdeenshire*, 113; on *Northumberland coast*, 394; in *North Devon*, 395  
'Index Generum et Specierum Animalium,' Report of British Association Committee on, 359  
'Index Zoologicus' of C. O. Waterhouse, additions and corrections to, 252  
*Indices*, recent *Zoological*, some generic names omitted from, 390  
*Inheritance*, experiments in, 358; of yellow coat colour in mice, 358  
*Insects*, swarms of, in the *Crimea* and at sea, 9; taken or seen during

- a cruise to the East, 262; vocal and instrumental music of, 376
- IRELAND—Richard's Pipit, 32; Osprey, 33; Night-Heron, 33; Ornithological notes, 75, 229; Pied Flycatcher, 269; Vertebrates of, 321, 397, 454; Great Black-backed Gull, 396; Migration of small birds, 421
- Iynx torquilla*, 393, 428
- Jackdaw, domestication of, 72
- Kent (North), birds of, 107; Kentish, some rare, 272
- Kestrel at Avignon, 174
- Kingfisher, 187; nesting of, 394
- Kite, Brahmini, in Colombo Harbour, 263
- Laelia cœnosa*, 472
- Lærtias romulus*, 264
- Lagis koreni*, 51
- Lagopus albus*, 114; *mutus*, 67, 114
- Lakeland (Cumberland and Westmorland), notes from (1905), 144, 185, 192
- Lamna cornubica*, 24, 104
- Lampris luna*, 103
- Lanius collurio*, 30; *excubitor*, 32; *pomeranus*, 269
- Lark, Crested, at Avignon, 174
- Larus argentatus*, 173; *canus*, 73; *fuscus*, 173; *marinus*, 109, 173; *ridibundus*, 73, 74, 109, 161
- Leptyphantes patens*, 423
- Lepus cuniculus*, 184, 417, 464; *europæus*, 184, 417, 464
- Lernæa branchialis*, 442
- Leuciscus dobula*, 17; *phoxinus*, 17; *rutilus*, 105
- Ligurinus chloris*, 66
- Limnoria lignorum*, 46, 47
- Limosa lapponica*, 395
- Linnet in Norway, 66
- Linota cannabina*, 66; *rufescens*, 227, 350
- Lithodomus*, 49; *dactylus*, 57
- Lithotrya*, 45
- Lutra vulgaris* (*lutra*), 92, 182, 226, 414
- MacroGLOSSA* sp., 262
- Macrotoma natala*, 77
- Magpie in Norway, 67
- Mallard in Norway, 67
- Mammals of Surrey, 178,—Wales and Ireland, 323, 454,—Channel Islands, 461; Cornish, notes on, 409, 466
- Mareca americana*, 156; *penelope*?, 156
- Marine animals, on the perforations of, 41
- Marten in England and Wales, 1
- Martin, House, at Avignon, 175; Sand, at Avignon, 175
- Mayo and Sligo, ornithological notes from, 229
- Melanerpes formicivorus*, 81
- Meleagris gallipavo*, 245
- Meles taxus* (*meles*), 182, 414, 426
- Menelaides hector*, 264
- Mergulus alle*, 114, 133
- Mergus albellus*, 73, 99
- Merlucius vulgaris*, 443
- Merodon, 389
- Metoponorthus cingendus*, 154
- Micaria pulicaria*, 424; *scintillus*, 424
- Micarisoma festiva*, 423
- Microneta innotabilis*, 423; *viaria*, 423
- Microtus agrestis*, 183, 417, 464,—*sp. aff.*, 463; *amphibius*, 184, 417, 464; *glareolus*, 183, 464
- Migration of birds, 106, 122, 129, 130, 429, 431; still a mystery, 106
- Migratory movements of certain Shore-Birds as observed on Dublin coast, Mr. C. J. Patten on, 360
- Molge vulgaris*, 159
- Molothrus bonariensis*, 245; *vulgaris*, 242
- Monkey, Proboscis, feeding habits of, 266
- Motacilla alba*, 66, 75; *cinereicapilla*, 178; *flava*, 178
- Moth, Humming-bird, at Avignon and Orange, 177
- Mouse, Wood (*fig.*), 183; Yellow-necked, 183
- Mugil capito*, 14; *chelo*, 13
- Muræna helena*, 23
- Mus alexandrinus*, 416, 464; *decumanus*, 183, 416, 462, 463, 464; *flavicollis*, 182; *minutus*, 182, 416; *musculus*, 182, 416, 462, 463, 464; *rattus*, 182, 416, 464; *sylvaticus*, 182, 416, 464
- Muscardinus avellanarius*, 182, 416
- Muscicapa atricapilla*, 222, 269
- Museums—Australian (Sydney), 317; Sarawak, 317



- Music, vocal and instrumental, of insects, 376
- Mustela martes*, 1, 98, 181, 413
- Mustelus vulgaris*, 24
- Myliobatis aquila*, 28
- Myotis daubentoni*, 178, 411; *mystacinus*, 179, 412; *nattereri*, 179, 411
- Mytilus edulis*, 201
- Myxine glutinosa*, 28
- Natica*, 57; *josephina*, 57
- Nectandra rhodiæi*, 58
- Nemachilus barbatulus*, 17
- Neomys (Sorex) fodiens*, 181, 189, 412
- Nephrops norvegicus*, 448
- Nereilepas fucata*, 52
- Nereis pelagica*, 48
- Nerophis æquoreus*, 16; *lumbriciformis*, 16; *ophidion*, 16
- Nest and eggs of Oystercatcher (fig.), 127; of Short-eared Owl (fig.), 468
- Nest of Great Black-backed Gull, unusual site for, 396
- Nesting of Lesser Redpoll in Middlesex, 227,—in Sussex, 350; of Wryneck, 393; of Kingfisher, 394; of Short-eared Owl at Rainworth, 467; late, of Great Crested Grebe, 351
- Newfoundland Sealing (1907), 151
- Newt, Common, in Carnarvonshire, 159
- Nightingale at Avignon, 176; breeding habits of, 328
- Nomenclature, Zoological, Mr. G. A. Boulenger on, 355
- Norfolk, ornithological report for 1907, 121, 314
- Norway—Birds of the Graakallen Mountain, 64; Cuckoo, 67; Ptarmigan, 67, 113
- Notidanus griseus*, 25
- Numenius arquatus*, 67, 108, 173; *phaëopus*, 111
- Nycticorax griseus*, 33
- OBITUARY:—
- Bingham, Charles Thomas, 465
- Carrington, John Thomas, 160
- Giard, Professor Alfred, 320
- Oceanodroma leucorhoa*, 73
- Ecophylla smaragdina*, 160
- Okapi, is it identical with the "Thahash" of the Jews?, 256
- Opah in North Devon, 103
- Orca gladiator*, 417
- Ornithological Notes—Chester and North Wales, 73; Mayo and Sligo, 75, 229; Lakeland, 144, 185, 192; South-western Hants, 156; West Renfrewshire, 230; Shipley district, 234; East Sussex, 345; Yarmouth, 345, 352; Richmond Park, Surrey, 432
- Ornithoptera darsius*, 263, 265
- Orthagoriscus mola*, 104
- Orthoptera, introduced, 116, 195
- Osprey in Co. Sligo, 33
- Otaria pusilla* (*Arctocephalus antarcticus*, *A. delalandii*), 214
- Otis tetrax*, 272
- Otter, notes on, 92, 158; breeding of, 93; parental care, 93; food, 95; destroying Moorhens, 226
- Ouzel, Ring, in Norway, 65
- Owl, Barn, 121, 346,—utility of, 127, —theories as to luminosity of, 122; Short-eared nesting at Rainworth, 467
- Oxfordshire, ornithology of (1907), 326
- Oystercatcher, notes on, with reference to its habit of feeding upon Mussel, 201; nest with four eggs at Blakeney, 126
- Pandalus annulicornis*, 441
- Pandion haliaëtus*, 33
- Panchlora fraterna*, 195
- Paralepis coregonoides*, 22
- "Parasitology," 315
- Parental instinct in birds, speculations on the origin and development of, 241
- Partridge, 367
- Parus cæruleus*, 246; major, 66, 113, 246; *palustris borealis*, 66
- Passer domesticus*, 66
- Peachia*, 43
- Pecten*, 49
- Peewit, 365
- Pelecanus crispus*, 471; *onocrotalus*, 471
- Penguin, Emperor, 249
- Penguins of the Angra de Sam Brás, 213
- Perca fluviatilis*, 105
- Perch, 105
- Perdix montana*, 135
- Perforations of marine animals, 41
- Pernis apivorus*, 156, 428, 468
- Petrel, Fulmar, off Kingsgate, Kent, 272; in Firth of Forth, 396

- Petromyzon branchialis*, 28; *fluvialis*, 28; *marinus*, 28  
*Phalarope*, Grey, 111  
*Phalaropus fulicarius*, 111  
*Philoscia couchii*, 154  
*Phoca vitulina*, 415  
*Phocæna communis*, 417  
*Pholades*, 49  
*Pholas*, 49; *candida*, 49; *crispata*, 49; *dactylus*, 49  
*Phoronis*, 44  
*Phylloscopus rufus*, 137; *trochilus*, 66; *sibilatrix*, 137  
*Pica rustica*, 67  
*Picus martius*, 190  
Pigeon, Wood, *diphtheria* in, 76  
*Pipa americana*, 247  
*Pipistrellus pipistrellus*, 411  
Pipit, Meadow, in Norway, 66; Richard's, in Ireland, 32,—in Norfolk, 130; Tree, in Norway, 66  
*Placuna placenta*, 42  
*Platephemera antiqua*, 456  
*Platylomia saturata*, 380  
*Platypleura octoguttata*, 382  
*Plecotus auritus*, 178, 411, 463  
*Plegadis falcinellus*, 113, 394, 395  
*Pleuronectes flesus*, 447  
Plover, Golden, 365; Kentish, 111; Ringed, 107, 109, 111,—breeding habits of, 365, 369,—male and female at nest (Plate III.)  
Pochard breeding in Berkshire, 139  
*Podiceps auritus*, 228; *capensis*, 469; *cristatus*, 351, 469; *fluvialis*, 351; *nigricollis*, 142, 228  
Polecat in North Devon, 97  
*Polydora*, 44  
*Polyneura ducalis*, 380  
*Polypterus senegalus*, 118  
Polyzoa, Dr. Sidney F. Harmer on, 354  
*Pomponia surya*, 380  
Porbeagle at Ilfracombe, 104  
*Porthesia auriflua*, 11  
*Porzana maruetta*, 429  
*Pristiurus melanostomus*, 24  
Prototrypid, gen. ? sp. ? (fig.), 194  
Ptarmigan reported near Trondhjem, Norway, 67, 113  
*Pterygistes noctula*, 178  
*Puffinus anglorum*, 396, 429  
*Putorius ermineus*, 181, 414; *foetidus* (*putorius*), 97, 181, 413; *nivalis*, 414; *vulgaris*, 182; sp., 462, 463  
*Pycna repanda*, 380  
*Pyrameis cardui*, 11  
*Pyrrhula europæa major*, 66  
Rabbits, malady amongst, 97  
*Raia alba*, 27; *batis*, 27; *blanda*, 27; *circularis*, 28; *clavata*, 27; *fulonica*, 27; *macrorhynchus*, 27; *maculata*, 22; *microcellata*, 28; *oxyrhynchus*, 27; *radiata*, 28  
*Raniceps trifurcatus*, 116  
*Ratitæ*, 247  
Ravens in the Carpathians, 401  
Redpoll, Lesser, nesting in Middlesex, 227,—in Sussex, 350  
Redshank, breeding habits of, 366, 368  
Redstart in Norway, 65  
Redwing in Norway, 65  
Reeve, 128  
*Regulus cristatus*, 65  
Renfrewshire, West (Caldwell District), birds of, 230  
Reptiles of Wales and Ireland, 323  
*Rhina squatina*, 26  
*Rhinoderma darwini*, 247  
*Rhinolophus ferrum-equinum*, 409, 464; *hipposiderus*, 410  
*Rhombus lævis*, 443; *megastoma*, 443  
Rhynchota and their parasites in South Africa, 193  
*Ruticilla phoenicurus*, 65  
*Salmo fario*, 18,—var. *cornubiensis*, 18; *salar*, 17; *trutta*, 18,—var. *cambrensis*, 18  
*Salticus formicarius*, 424  
Sandpiper, 109; in Norway, 67  
*Saxicara*, 49  
*Saxicola œnanthe*, 65, 164  
*Sceliphron spirifex*, 384  
*Sciurus vulgaris* (*leucurus*), 182, 416, 464  
*Scolopax rusticola*, 67  
*Scombrosox saurus*, 15  
SCOTLAND — Distinct types in eggs, 74; Glossy Ibis, 113; Common Shrew, 189; Birds of West Renfrewshire, 230; Snipe, 271; Fulmar Petrel, 396  
*Scyllium canicula*, 24; *catulus*, 24  
Sea-Bream, Black, at Yarmouth, 115, 442  
Sea-Mouse near Plymouth, 470  
Seal, Grey, in Mersey, 268  
Seals of the Angra de Sam Brás, 213  
Sealing, Newfoundland, 151  
*Selache maxima*, 25



- Sericomya borealis*, 387; *lapponum* (*lappona*), 387  
 Sex, Mr. L. Doncaster on recent work on determination of, 357  
 Sexual selection in birds, 191  
*Shearwater*, Manx, in Oxfordshire and Gloucestershire, 396; September movements of, 429  
*Shipley* district, ornithological notes from, 234  
 Shore-birds, migratory movements of certain, 360  
*Shrew*, Common (fig.), 180,—in Skye, 189; Lesser (fig.), 180; Water (fig.), 180, 181, 189,—gregarian occurrence in Yorkshire, 189  
*Shrike*, Great Grey, near York, 32; Red-backed, eggs of, 30, 74  
*Sipheniscus demersus*, 214  
*Siphonostoma typhle*, 15  
*Sipunculus*, 44  
*Siskin* in Norway, 66  
*Smelt*, deformed (fig.), 446  
*Smew* in Northumberland, 73  
*Snake*, Rat, 263; Smooth, in Devonshire, 34  
*Snipe*, "drumming" of, 271  
 Snow, effect of, on bird-life, 192  
*Solea variegata*, 103  
 Songs of Chiffchaff and Willow-Wren, 190, 226, 227, 230, 268, 313  
*Sorex araneus*, 180, 189, 412, 461, 463; *fodiens*, 189; *minutus*, 180, 412  
*Spawn*, Alytes, 472; Hyla, 472  
*Sparrow*, Hedge, in Norway, 66; House, in Norway, 66  
*Sphæromidæ*, 47  
*Spheniscus demersus*, 214  
*Sphex arenaria*, 385  
*Sphinx ligustri*, proboscis or tongue of (fig.), 435  
 Spiders, Myrmecophilous, a few notes on, 419  
*Staines* district, birds of, 137  
*Starling* in Norway, 67; early flocks of, 312, 350  
*Sterna cantiaca*, 161, 351; *fluviatilis*, 110, 141, 161, 352; *fuliginosa*, 212; *minuta*, 110, 164  
*Stoat*, note on, 462  
*Stonechat*, 143  
*Strepsilas interpres*, 109  
*Strongylocentrotus drobachiensis*, 43  
*Struthio camelus*, 243, 245  
*Sturnus vulgaris*, 67, 164, 242, 312, 350  
 Sunfish at Ilfracombe, 105  
 Sussex, East, rough notes in, 345  
 Swallows at Avignon, 175  
 Swan, Whooper, 145  
*Swift*, Alpine, at Avignon, 176,—at Lynmouth, North Devon, 269; Common, at Avignon, 175  
*Sylvia cinerea*, 193; *nisoria*, 393  
*Sympetrum fons-colombii*, 10  
*Syngnathus acus*, 16; *rostellatus*, 16  
*Synotus barbastellus*, 178  
*Syrphus baleatus*, 387; *bifasciatus*, 387; *ribesii*, 387  
*Syritta pipiens*, 385, 389  
*Syrhaptus paradoxus*, 312  
*Tabanus bovinus*, 388  
*Tadorna cornuta*, 139, 163  
*Tænia cœnurus*, 97  
*Talegallus*, 245  
*Talicada nyseus*, 264  
*Talpa europæa*, 98, 179, 412, 461, 463  
*Tatusia septemcincta*, 393  
 Teal breeding in North Devon, 100  
 Teredines, 50  
*Teredo*, 44; *arenaria*, 52; *corniformis*, 52; *navalis*, 52  
 Tern, Arctic, 230, 264; Black, 112; Common, breeding habits of, 169, 361, 368,—with chick and egg (Plate II.); Lesser, breeding habits of, 172, 363, 367; Sandwich, breeding habits of, 166, 230, 351  
 Ternery at Wells-by-the-Sea, a visit to the, 361  
 Terns at Avignon, 175  
*Tetrao urogallus*, 67  
*Tetrilus aretinus*, 422  
*Tettigia orni*, 379, 380, 382  
*Thahash*, 256  
*Thalassema*, 44  
*Theridium riparium*, 423  
*Thracia convexa*, 49  
 Thrush, Mistle, in Norway, 64; Song, in Norway, 64  
*Thyreosthenius biovatus*, 419, 421  
*Tibicina hæmatodes*, 379, 383  
*Tinea vulgaris*, 17  
*Tipula oleracea*, 434  
 Tit, Great, in Norway, 66, 113 (var.), —at Avignon, 174; Marsh, at Avignon, 174; Northern Marsh, in Norway, 66  
 Tits feeding on maize, 155  
 Toad, Sumatran, interesting feeding habits of, 265  
 Toads, swarms of, in the Crimea, 11  
*Torpedo nobiliana*, 26

- Totanus calidris*, 108, 141, 164; *hy-*  
*poleucus*, 67, 109, 173; *ochropus*,  
 108  
*Trachurus trachurus*, 447  
*Trigla hirundo*, 444  
*Tringa alpina*, 110, 173; *canutus*,  
 352  
*Troglodytes parvulus*, 66  
*Trygon pastinaca*, 28  
*Tuco-Tuco*, notes on, 392  
*Turdus iliacus*, 65; *merula*, 312;  
*musicus*, 64; *pilaris*, 65; *torqua-*  
*tus*, 65, 137; *viscivorus*, 64  
*Turnstone*, 109, 110  
  
*Upupa epops*, 272  
*Uria troile*, 30  
  
*Vanellus vulgaris*, 108, 164  
 Variety of Blackbird, 135; Bull-dog  
 Cod-fish, 446; Dabchick, 136;  
 Fieldfare, 135; Flounder, 353;  
 Lapwing, 102; Linnet, 100; Mole,  
 98; Partridge, 135; Plover, Ringed,  
 136; Rail, Water, 135; Redwing,  
 135; Smelt, 446; Tern, Lesser,  
 136; Titmouse, Great, 113; Vole,  
 Bank, 149; Vole, Water, 190;  
 Wigeon, 156  
 Vermin, Society for the destruction  
 of, 238  
*Verruca*, 57  
 'Vertebrate Fauna of North Wales,'  
 a correction in, 77  
 Vertebrates of Wales and Ireland,  
 321, 397, 454; Corrigenda et Ad-  
 denda, 454  
*Vespa germanica*, 386  
*Vespertilio serotinus*, 411, 463  
*Vesperugo pipistrellus*, 78, 463; *sero-*  
*tinus*, 463  
 Vole, Field, note on, 463; Jersey,  
 note on, 462  
*Vulpes vulpes*, 412, 464  
*Vultur monachus*, 403  
 Vultures in the Carpathians, 401, 403  
  
 Wagtail, White, in Norway, 66;  
 Yellow, at Avignon, 176  
  
 WALES — Ornithological notes, 73;  
 Correction of error in 'Vertebrate  
 Fauna of North Wales,' 77; Honey-  
 Buzzard, 156; Common Newt, 159;  
 Chiffchaff, 268; Vertebrates of, 321,  
 397, 454  
 Warbler, Aquatic, near Eastbourne  
 (Plate V.), 467; Barred, in Nor-  
 folk, 393; Garden, at Avignon,  
 176; Marsh, at Thorpe, Surrey,  
 137; Willow, in Norway, 66  
 Warblers on ship at sea, feeding on  
 moths, 9  
 Whale, dead, stranded at Hartland  
 Point, N. Devon, 98  
 Whaling Voyage, Arctic, 61  
 Wheatear in Norway, 65; Desert, in  
 Norfolk (Plate I.), 121, 132  
 Whimbrel, 111  
 Whinchat in Norway, 65  
 Wildfowl on Blagdon Reservoir,  
 Somerset, 73, 114  
 Woodcock in Norway, 67  
 Woodlouse, a rare, new to the fauna  
 of Great Britain, 152  
 Woodpecker, Great Black, 190;  
 Great Spotted, some notes on a  
 habit of, in relation to a similar  
 but more developed habit in  
 the Californian Woodpecker, 81,  
 228  
 Wren in Norway, 66; Golden-crested,  
 in Norway, 65; Willow, at Avig-  
 non, 176  
 Wryneck, nesting of, 393; in North  
 Lancashire, 428  
  
*Xema sabinii*, 352  
*Xylophaga*, 48; *dorsalis*, 50  
  
 Yellowhammer in Norway, 66  
  
*Zeugopterus punctatus*, 442  
 Zoology, Indian, in 1907, Dr. Annan-  
 dale on, 316  
*Zygæna malleus*, 24

## PLATES.

	PAGE
Plate I. American Black Brent ( <i>Bernicla nigricans</i> ) . . . to face	121
„ II. Common Tern with Chick and Egg . . . „	361
„ III. Male and female Ringed Plover at Nest . . . „	365
„ IV. Golden Eagle ( <i>Aquila chrysaëtus</i> ) on a carcass . . . „	401
„ V. Aquatic Warbler ( <i>Acrocephalus aquaticus</i> ) . . . „	467

## ILLUSTRATIONS IN TEXT.

<i>Chelifer</i> found attached to Longicorn Beetle ( <i>Macrotoma natala</i> ) .	77
Oystercatcher's Nest and Eggs . . . . .	127
Little Auk ( <i>Mergulus alle</i> ) . . . . .	133
<i>Chelifer</i> with Eggs at base of abdomen . . . . .	160
Water, Common, and Lesser Shrews, to show relative sizes . .	180
Yellow-necked Mouse and Wood Mouse, to show relative sizes .	183
<i>Anoplocnemis curvipes</i> , Fabr., and parasite, Proctotrypid, gen.? sp.?	194
Nest and Eggs of Montagu's Harrier . . . . .	309
Proboscis or tongue of <i>Sphinx ligustri</i> :—Upper figure, outline of head and thorax of pupa; lower figure, the same, with horny case dissected away . . . . .	435
Deformed Bull-dog Cod-fish . . . . .	444
Deformed Smelt . . . . .	446
Bull-dog Cod-fish . . . . .	446
Illustration to Notes on Ephemeridæ:— I. Portion of wing of <i>Ephemera vulgata</i> . II. Tail-filament of <i>Clæon</i> larva. III. Portion of tail-filament of fly of <i>Ephemera vulgata</i> . IV. Gill of <i>Clæon</i> larva. (See also "Explanation," p. 460) . . . .	459
Nest of Short-eared Owl . . . . .	468

